

Application Serial No.: 10/694,762

Further to the Request for Reconsideration filed on December 29, 2004,  
and in response to the Office Action dated September 29, 2004

### IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~A shock~~ An impact absorber for vehicles, the ~~shock~~ impact absorber comprising:

a housing having an impact receiving member with at least one hollow formed therein, formed of a rigid material, and configured to be fixed to a bone structural member of vehicles, said impact receiving member being configured to plastically deform upon impact;  
and

a ~~shock-energy~~ impact-energy absorbing member disposed in the hollow of the housing ~~at least~~, and formed of a super plastic polymer material exhibiting a tensile breaking elongation of 200% or more, a yield strength of 20 MPa or more with respect to a predetermined strain and a tensile elastic modulus of 400 MPa or more,

wherein the ~~shock-energy~~ impact-energy absorbing member has a surface ~~at least~~, the surface facing a ~~shock~~ an impact input direction and disposed in a manner contacting closely with an inner surface of the ~~housing~~ impact receiving member, and

wherein the ~~shock-energy~~ impact-energy absorbing member is pre-compressed in a ~~shock~~ the impact input direction within the housing.

2. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein a part or the entirety of the housing is made of the bone structural member.

3. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein the super plastic polymer material is produced by mixing flakes of polyethylene terephthalate with resin and rubber and reacting them chemically.

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4-5. (Canceled)

6. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein the housing has a thickness of 2 mm or less.

7. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein the super plastic polymer material exhibits a tensile breaking elongation of 250% or more.

8. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein the super plastic polymer material exhibits a yield strength of 25 MPa or more with respect to a predetermined strain.

9. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein the super plastic polymer material exhibits a tensile elastic modulus of 500 MPa or more.

10. (Currently Amended) The ~~shock~~ impact absorber set forth in claim 1, wherein the super plastic polymer material absorbs ~~shock~~ impact energies in an amount of at least 2.5 times of an amount of ~~shock~~ impact energies absorbed by polyurethane foam.

11. (New) The impact absorber set forth in claim 1, wherein said impact receiving member is a crush box.

12. (New) The impact absorber set forth in claim 1, wherein said impact receiving member includes a generally cylindrical portion having a stepwise increase in diameter from a first end thereof to a second end thereof.

13. (New) The impact absorber set forth in claim 12, wherein said first end has a bumper stay attached thereto, and said second end is a ring-shaped flange.

14. (New) The impact absorber set forth in claim 1, wherein said impact receiving member is a cylinder-shaped housing configured to be fastened coaxially outside of an

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impact beam.

15. (New) The impact absorber set forth in claim 1, wherein said impact receiving member has a protrusion with a U-shaped cross-sectional shape, wherein said impact absorbing member has a U-shaped cross-sectional shape, and wherein said impact absorbing member is nested within said protrusion.

16. (New) The impact absorber set forth in claim 1, wherein said impact-energy absorbing member is configured to deform plastically upon impact.